

## ABSTRACT OF THE INVENTION

A gaseous fuel pressure regulator uses an inlet valve and an outlet valve to regulate an incoming pressure, from a gaseous fuel supply tank, and accurately control the pressure at the outlet of the regulator. The control of the outlet pressure is maintained by precise movement of the outlet valve which is controlled by an actuator. The actuator receiving pulse width modulated signals from a microprocessor in order to maintain the outlet valve in an opened, or gas flow permitting, position for a time period which is appropriate to maintain the desired pressure at the outlet port of the regulator. An inlet port maintains a pressure within a conduit, which is connected in fluid communication between the inlet port and the outlet port at an intermediate pressure which is used by the outlet valve to achieve the desired outlet pressure magnitude.